Bootstrap

What is Twitter Bootstrap?

- A ‘framework’ for web interface design
- A Software Development Kit (SDK) for front-end design.
- Easily modifiable styles and scripts
- Free and open-source
- A ‘widely-adopted standard’

Created By

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jacob thornton

@fat

I work for twitter... I write comics sometimes (http://t.co/GucZD6o) and javascript (http://t.co/oFcXhQl) other times.

San Francisco, CA

Technologies used

Twitter Bootstrap

combines
HTML , CSS & JavaScript
into an '**easy-to-use**' &
'**rapid deployment**'
framework

HTML / HTML 5

CSS / CSS3 / LESS

JavaScript / jQuery

Why

Reason #1: Rich Features

Designed for everyone, everywhere.

Need reasons to love Bootstrap? Look no further.

Built for and by nerds

Like you, we love building awesome products on the web. We love it so much, we decided to help people just like us do it easier, better, and faster. Bootstrap is built for you.

For all skill levels

Bootstrap is designed to help people of all skill levels—designer or developer, huge nerd or early beginner. Use it as a complete kit or use to start something more complex.

Cross-everything

Originally built with only modern browsers in mind, Bootstrap has evolved to include support for all major browsers (even IE7!) and, with Bootstrap 2, tablets and smartphones, too.

12-column grid

Grid systems aren't everything, but having a durable and flexible one at the core of your work can make development much simpler. Use our built-in grid classes or roll your own.

Responsive design

With Bootstrap 2, we've gone fully responsive. Our components are scaled according to a range of resolutions and devices to provide a consistent experience, no matter what.

Styleguide docs

Unlike other front-end toolkits, Bootstrap was designed first and foremost as a styleguide to document not only our features, but best practices and living, coded examples.

Growing library

Despite being only 10kb (gzipped), Bootstrap is one of the most complete front-end toolkits out there with dozens of fully functional components ready to be put to use.

Custom jQuery plugins

What good is an awesome design component without easy-to-use, proper, and extensible interactions? With Bootstrap, you get custom-built jQuery plugins to bring your projects to life.

Built on LESS

Where vanilla CSS falters, LESS excels. Variables, nesting, operations, and mixins in LESS makes coding CSS faster and more efficient with minimal overhead.

HTML5

Built to support new HTML5 elements and syntax.

CSS3

Progressively enhanced components for ultimate style.

Open-source

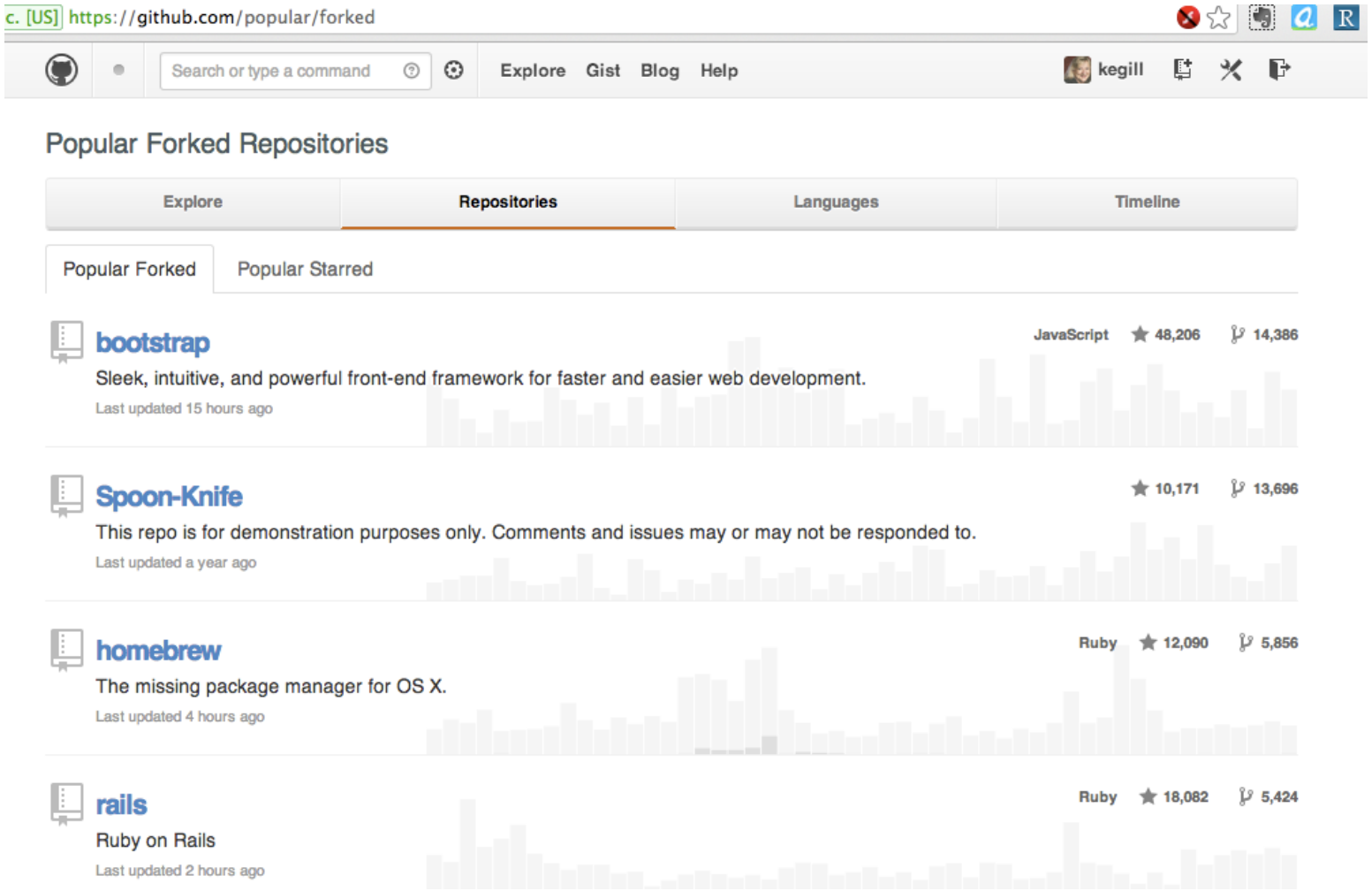
Built for and maintained by the community via GitHub.

Made at Twitter

Brought to you by an experienced engineer and designer.

Why

Reason #2: Popularity



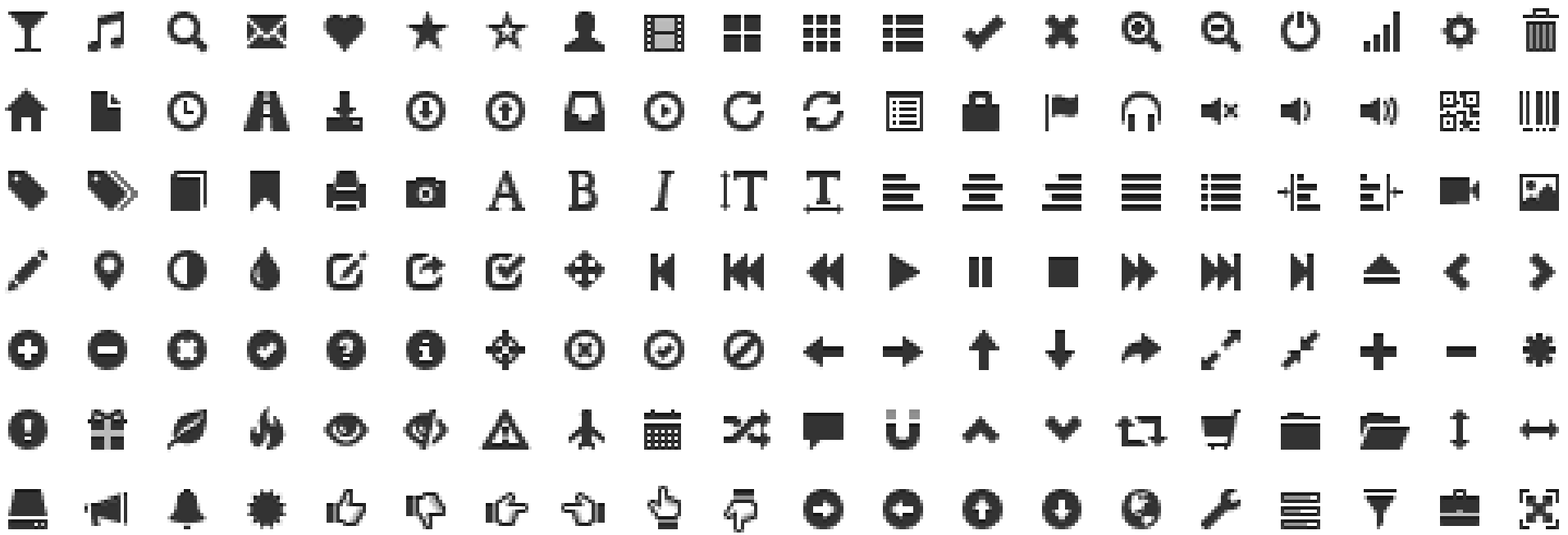
Why

Reason #3: Browser Support

Also MSIE and Opera

Why

Reason #4: Glyph Icon Set



Why

Reason #5: Grid System

- 960 Grid System http://960.gs/
- Blue Print CSS http://www.blueprintcss.org/
- Golden Grid System http://goldengridsystem.com/

Why

Reason #6: Components

- Buttons:

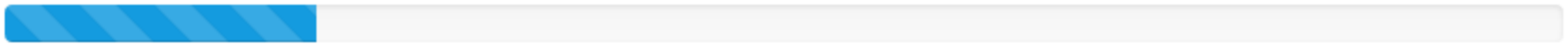
- Tabs:

- Breadcrumb:

- Pagination:

- Alerts:

- Progress bar:



Why

Reason #7: Javascript/jQuery

- [x] Transitions (required for any animation)
- [x] Modals
- [x] Dropdowns
- [x] Scrollspy
- [x] Togglable tabs
- [x] Tooltips
- [x] Popovers (requires Tooltips)
- [x] Affix
- [x] Alert messages
- [x] Buttons
- [x] Collapse
- [x] Carousel
- [x] Typeahead

Why

Reason #8: Customization

Scaffolding

- [x] Normalize and reset
- [x] Body type and links
- [x] Grid system
- [x] Layouts

Base CSS

- [x] Headings, body, etc
- [x] Code and pre
- [x] Labels and badges
- [x] Tables
- [x] Forms
- [x] Buttons

Components

- [x] Button groups and dropdowns
- [x] Navs, tabs, and pills
- [x] Navbar
- [x] Breadcrumbs
- [x] Pagination
- [x] Pager
- [x] Thumbnails
- [x] Alerts
- [x] Progress bars
- [x] Hero unit
- [x] Media component

Miscellaneous

- [x] Media object
- [x] Wells
- [x] Close icon
- [x] Utilities
- [x] Component animations

Responsive

- [x] Visible/hidden classes
- [x] Narrow tablets and below (<767px)
- [x] Tablets to desktops (767-979px)
- [x] Large desktops (>1200px)
- [x] Responsive navbar

- http://balsamiq.com/products/mockups/
- http://www.mockplus.cn/

Getting up and running with Bootstrap

Downloading and setting-up
(Local Web Site)

In this section, we will learn how to:

- Download the Twitter Bootstrap source files

- Fix the URLs to make the Bootstrap site work in a ‘local folder’ on your computer

- Integrate the jQuery library

Downloading the Bootstrap Files

1. Create a **new folder** on your desktop

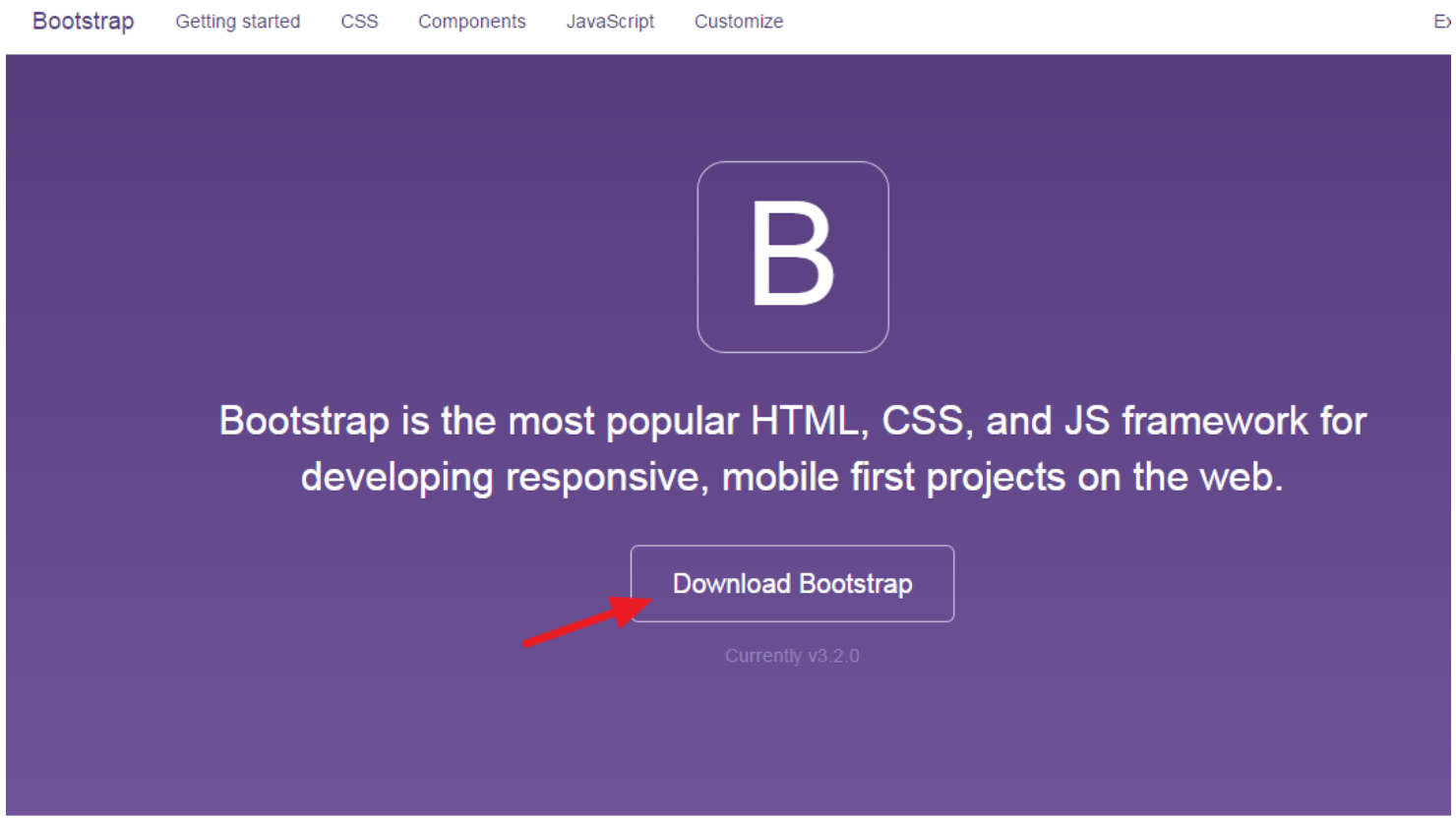
2. Go to www.GetBootstrap.com

3. Click on the large **‘Download Bootstrap’** button

4. Save the file ‘bootstrap.zip’ in the **new folder** and unzip the file

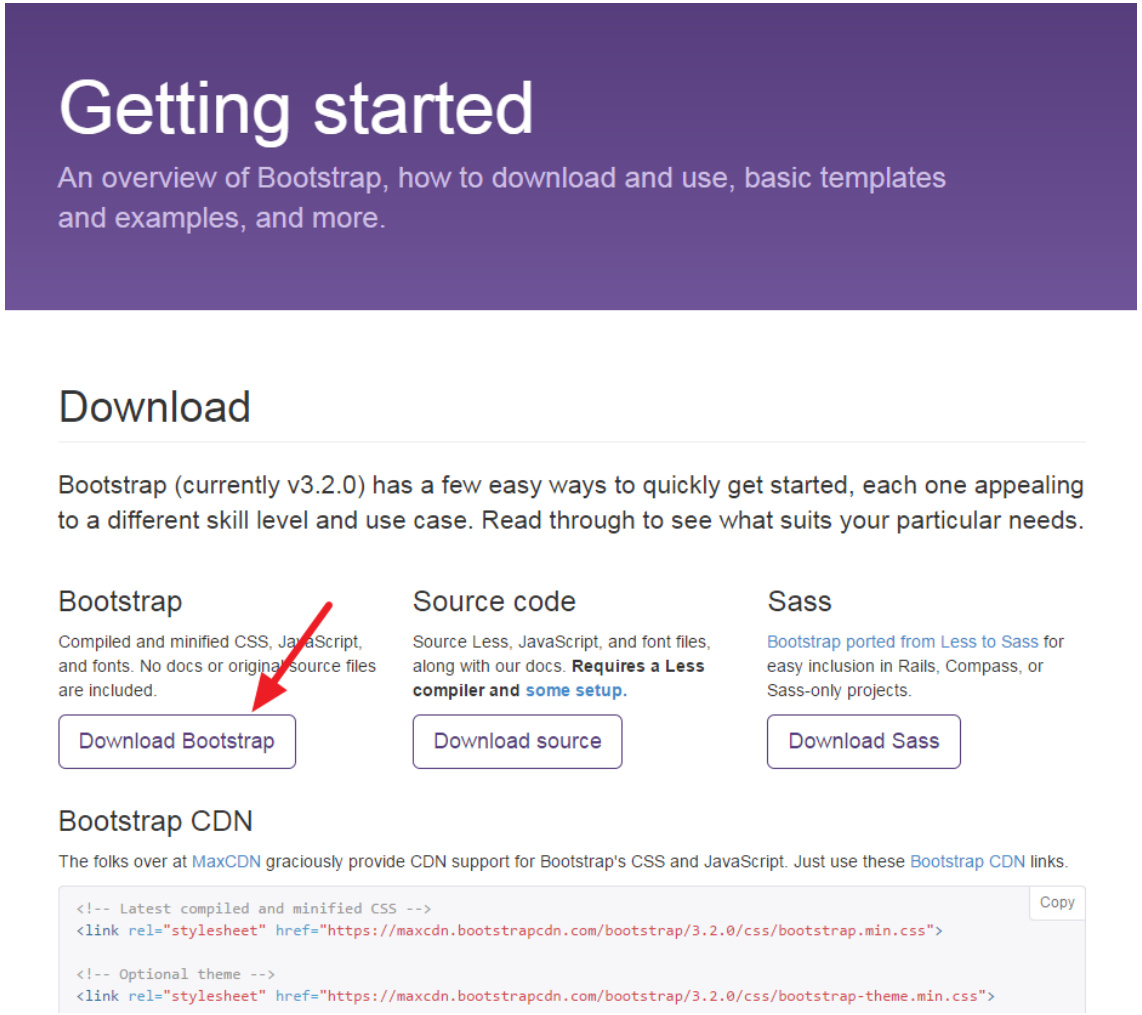
Downloading the Bootstrap Files-1

1. Go to www.GetBootstrap.com



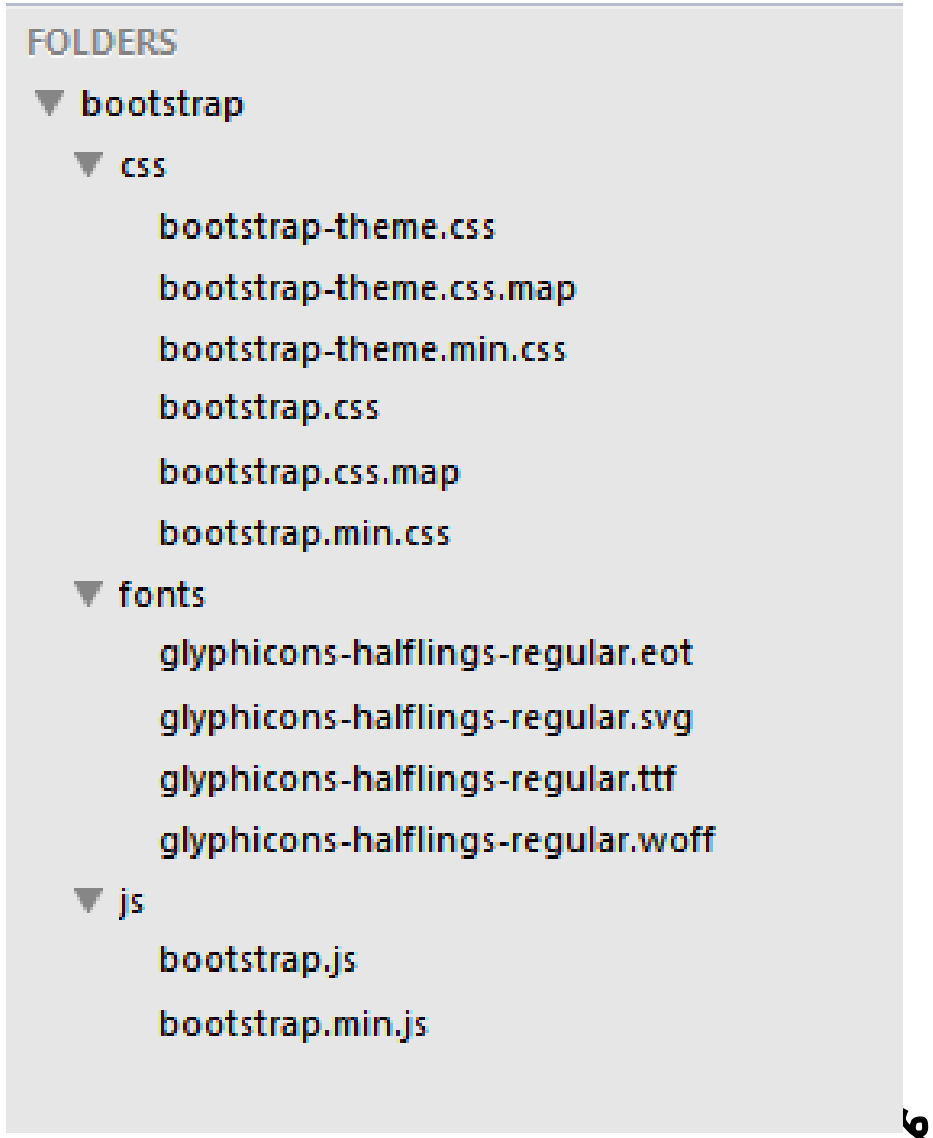
Downloading the Bootstrap Files-2

2. Download bootstrap files



Downloading the Bootstrap Files-3

3. Extract bootstrap files and copy the three folders to the directory "demo1"



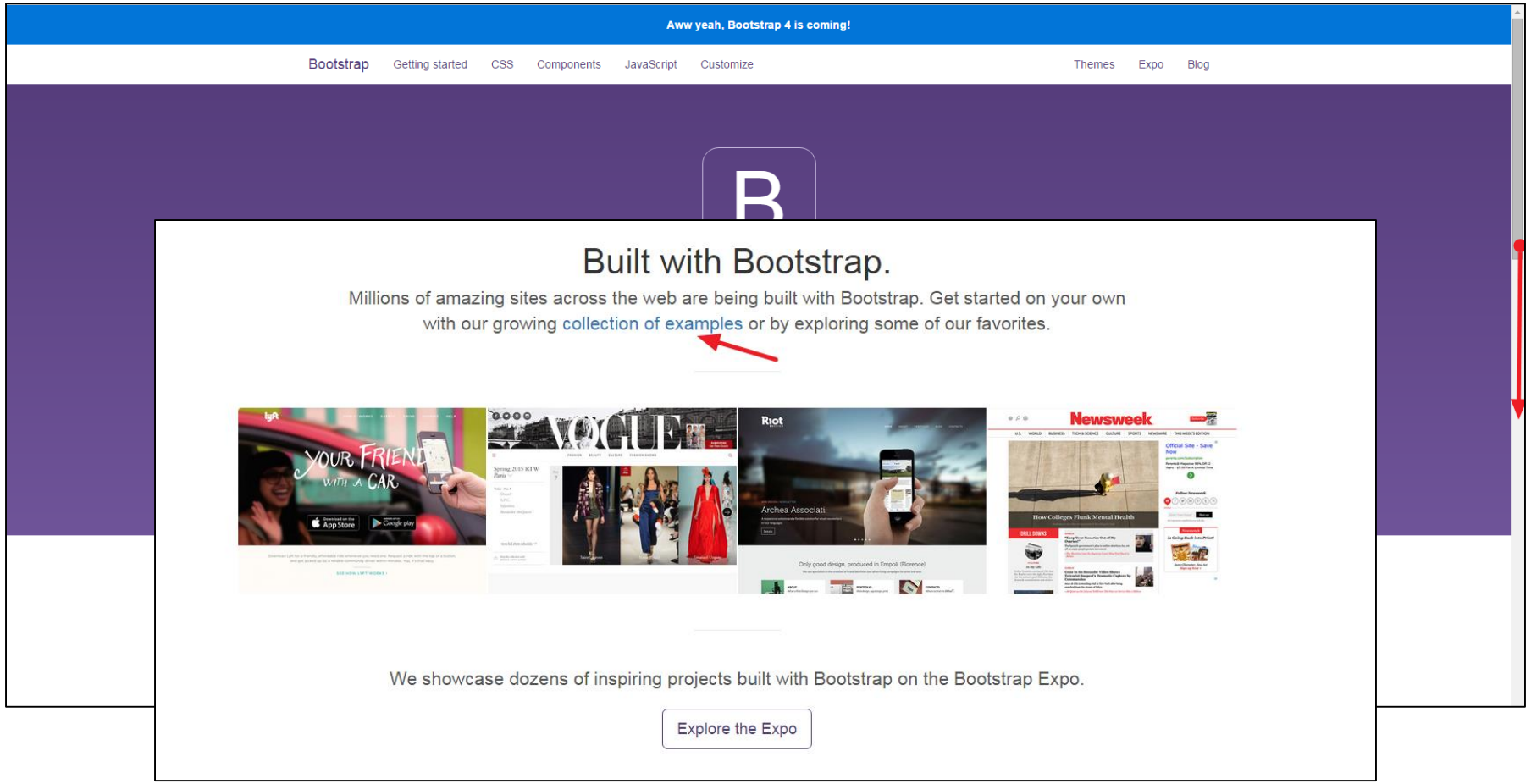
Fixing the URLs to work locally

Set up Bootstrap to work within a local folder on your computer.

1. From page "**Get Started",** scroll down to ‘Examples,’ right-click on the ‘**Jumbotron**’ and save it as **jumbotron.html**
2. Open ‘**jumbotron.html**’ in your browser. Notice that the HTML displays, but the CSS is not integrated.
3. Open ‘**jumbotron.html**’ in your text-editor.

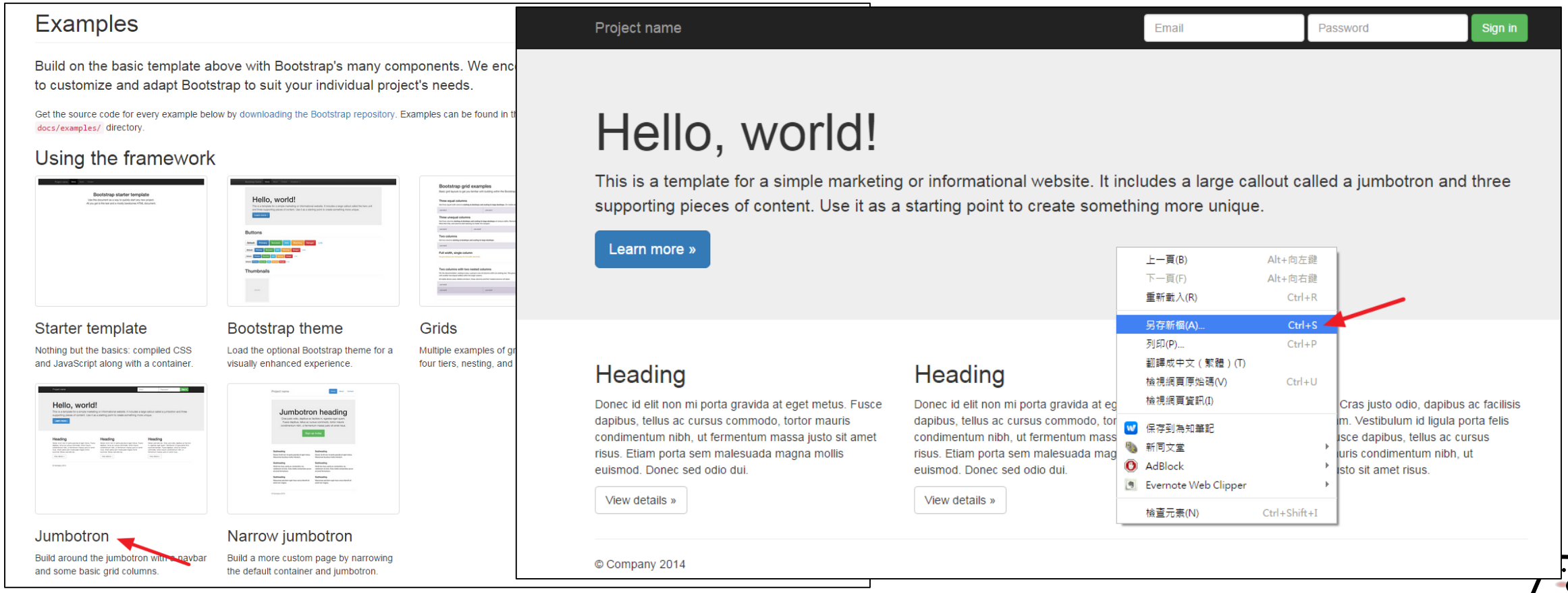
Fixing the URLs to work locally-1

1. Download **Jumbotron template as "jumbotron.html"**



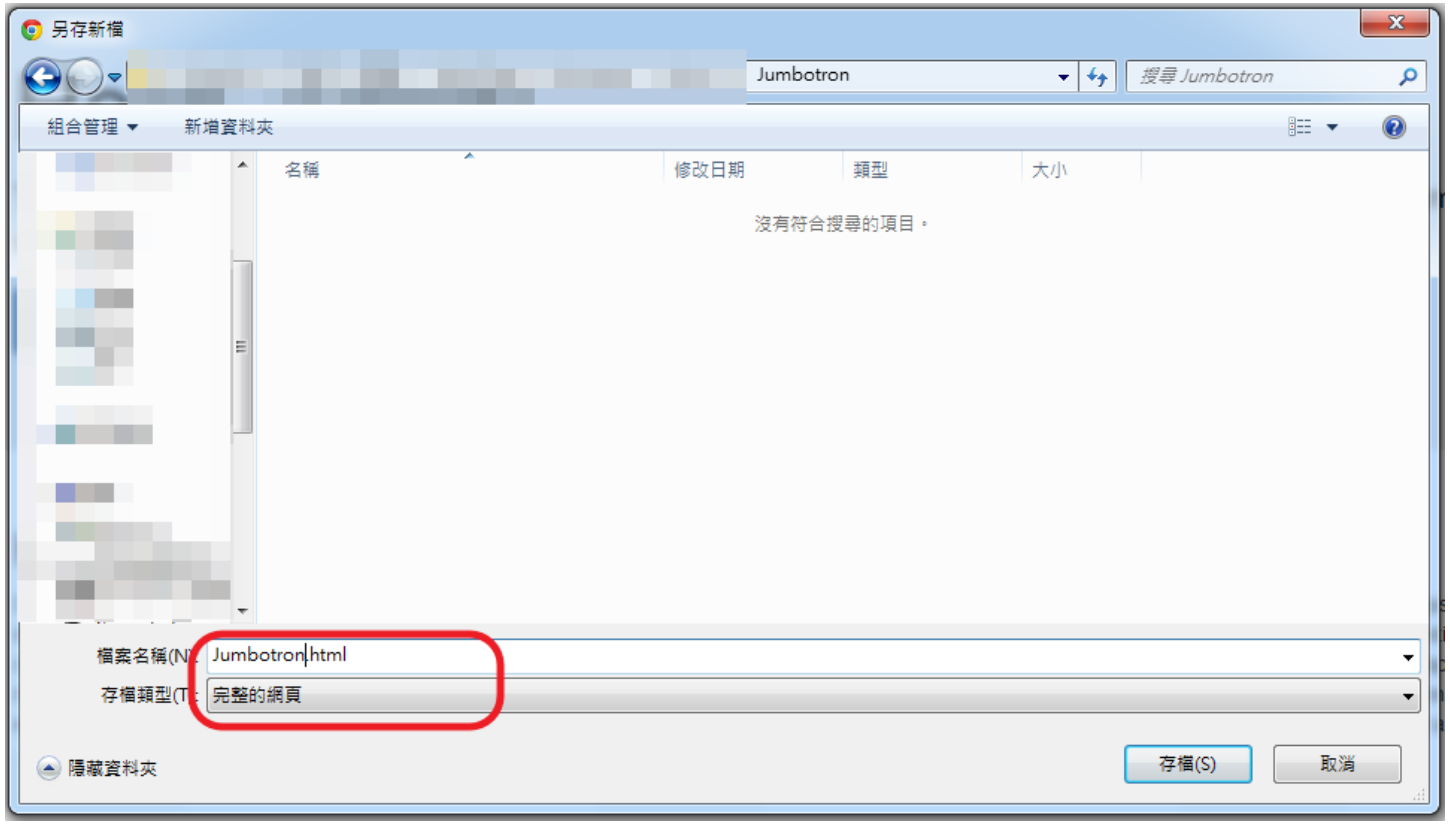
Fixing the URLs to work locally-1

1. Download **Jumbotron template as "jumbotron.html"**



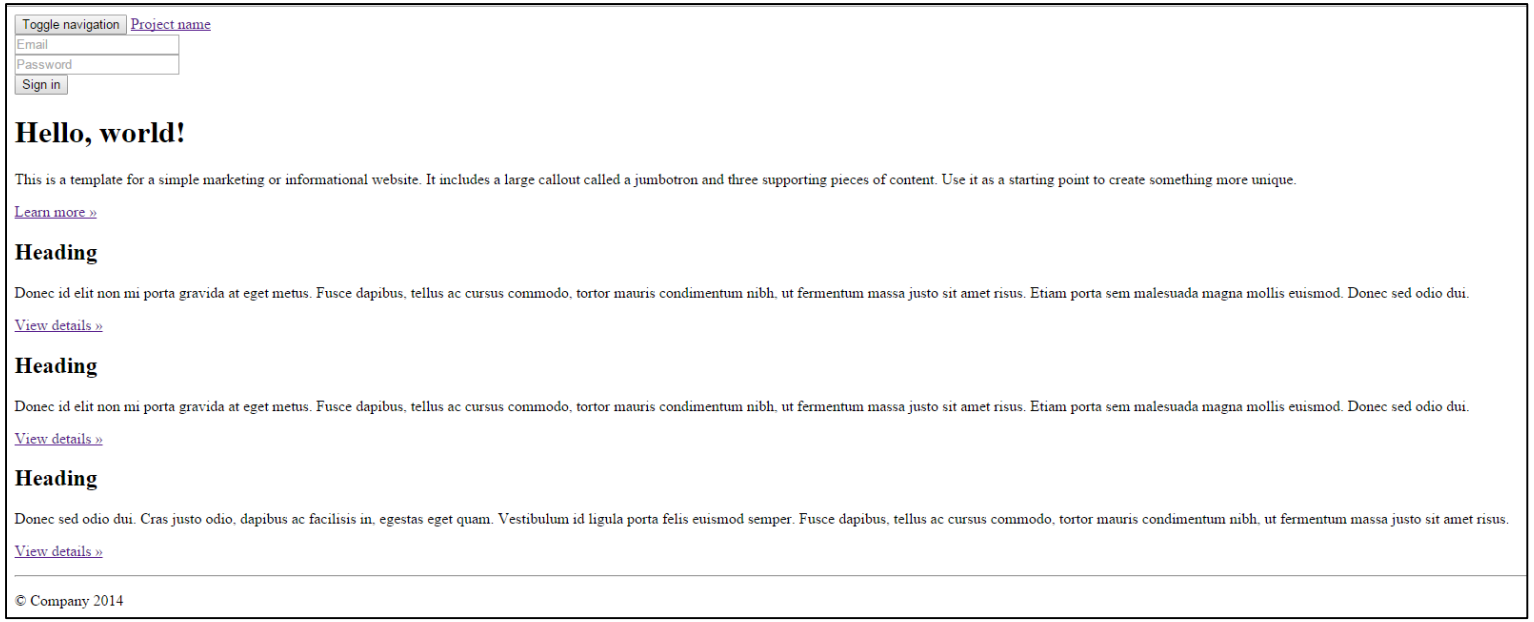
Fixing the URLs to work locally-1

1. Download **Jumbotron template as "jumbotron.html"**



Fixing the URLs to work locally-2

2. Move **"jumbotron.html"** to **"demo1"**
3. Move **"jumbotron.css"** to **"demo1/css"**
4. Move all **"*.js"** files to **"demo1/js"**



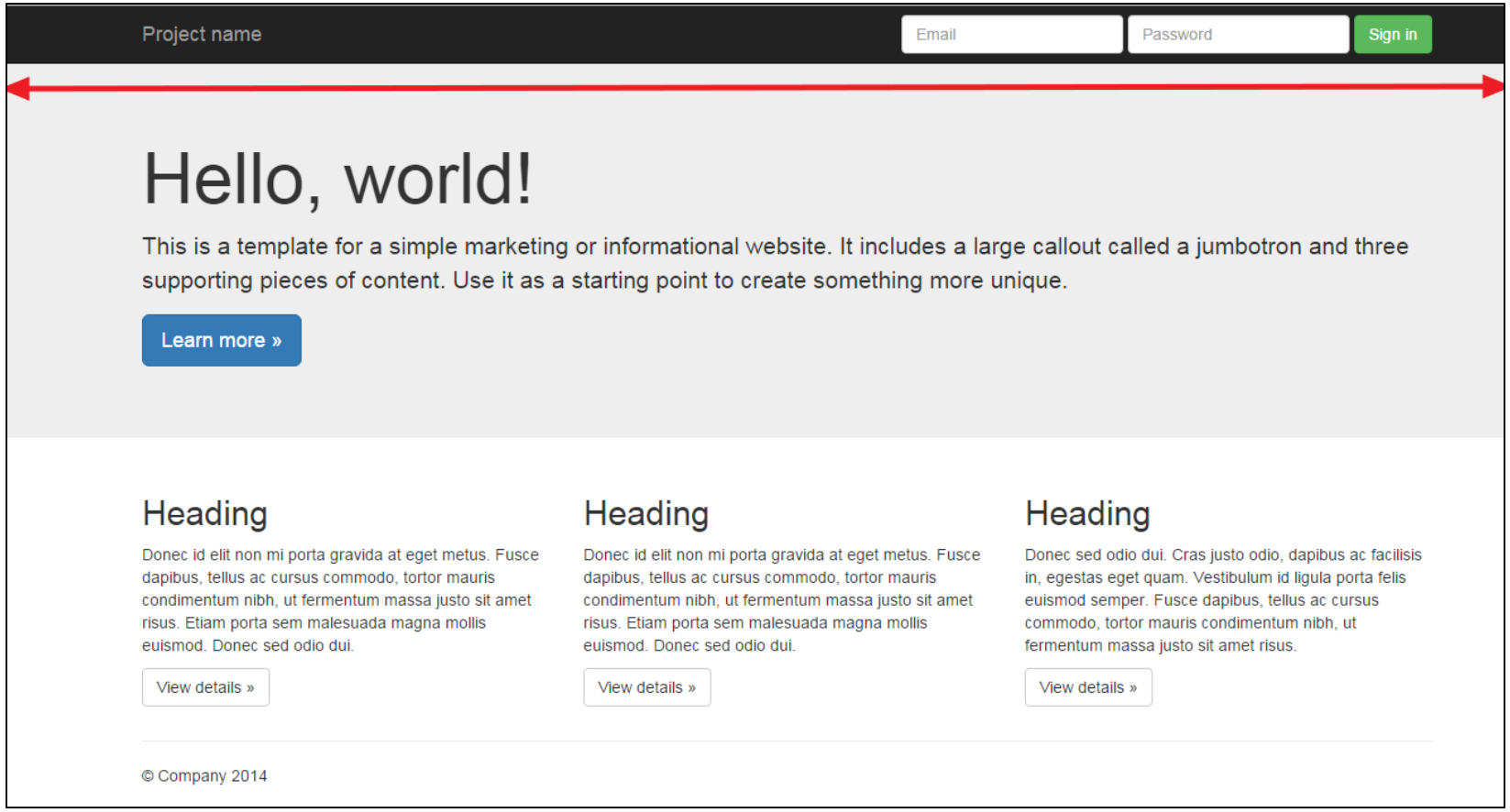
Fixing the URLs to work locally-2

5. In your text-editor, fix the URLs to work locally by

- renaming all **css** files' path from **'Jumbotron_files'** to **'css'**, and
- renaming all **js** files' path from **'Jumbotron_files'** to **'js'**.

Fixing the URLs to work locally-2

6. Stretch and shrink the width of your browser.



Project name
Logged in as Username
Home
About
Contact
SIDEBAR
Link
Link
Link
Link
SIDEBAR
Link
Link
Link
Link
Link
Link
SIDEBAR
Link
Link
Link
Hello, world!
A good test to see if the jQuery and the Bootstrap JavaScript files are linked correctly is to test the navigation menu to see if the drop-down is working.
ting pieces
e unique.
Heading
Donec id elit non mi porta gravida
Heading
Donec id elit non mi porta gravida
Heading
Donec id elit non mi porta

Additional set-up notes

There are two pieces of code that appear in the example Bootstrap HTML files that you should take note of and understand their purpose:

1. The '**meta viewport**' tag in the head of the doc; and

2. The '**HTML5 shim**' (a.k.a. '**HTML5 shiv**')

The ‘**meta viewport**’ tag

In the head of the Bootstrap example HTML file, you will notice the following code:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

Short explanation: this code is **‘a fix to control iOS’s scaling behaviour’** when iOS devices rotate between portrait and landscape.

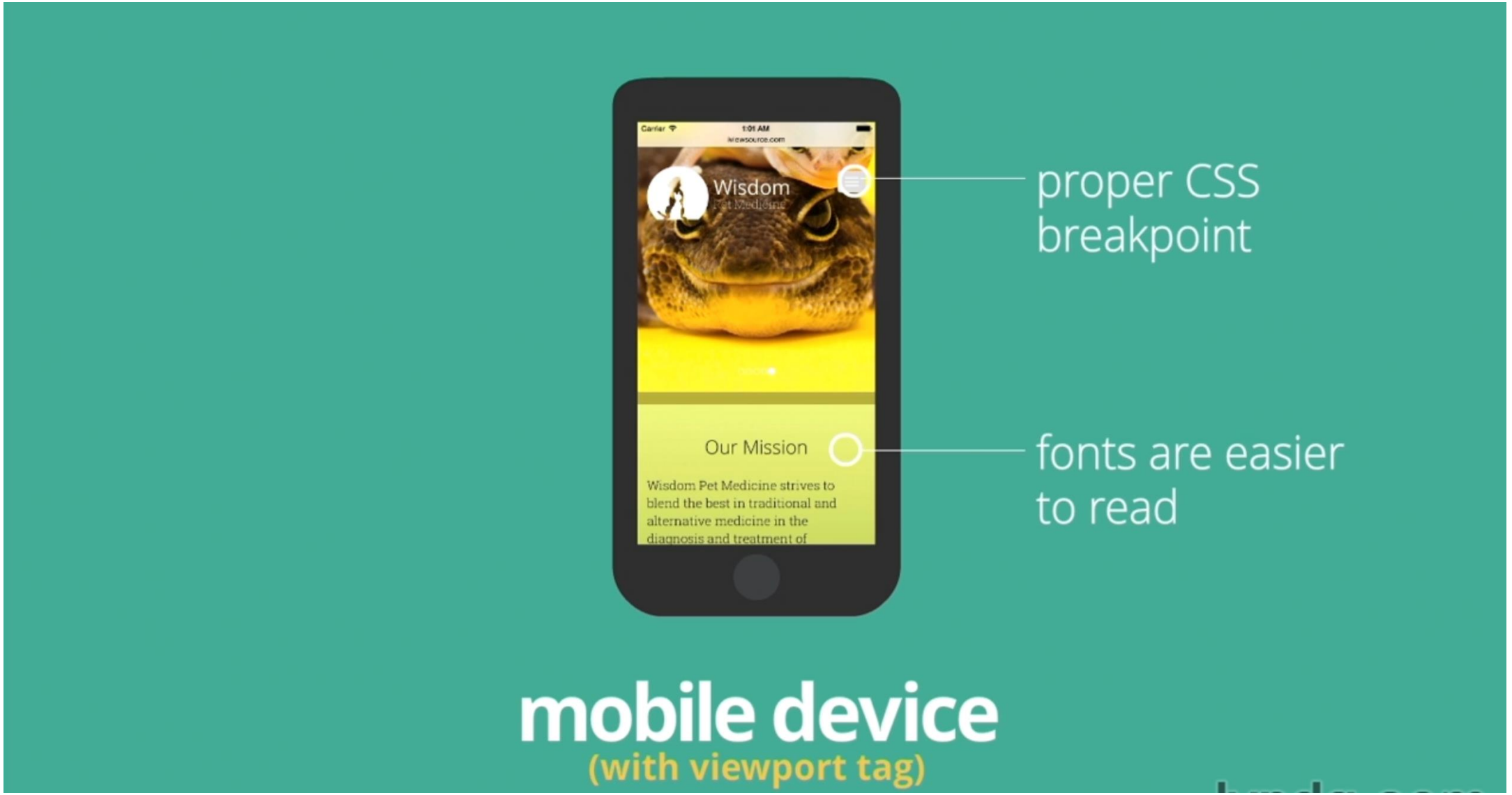
Without viewport tag

displays wrong breakpoint

fonts too small

mobile device
(without viewport tag)

With viewport tag



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <title>Bootstrap, from Twitter</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta name="description" content="">
    <meta name="author" content="">

    <!-- Le styles -->
    <link href="css/bootstrap.css" rel="stylesheet">
    <style type="text/css">
      body {
        padding-top: 60px;
        padding-bottom: 40px;
      }
      .sidebar-nav {
        padding: 9px 0;
      }

      @media (max-width: 980px) {
        /* Enable use of floated navbar text */
        .navbar-text.pull-right {
          float: none;
          padding-left: 5px;
          padding-right: 5px;
```

basic bootstrap template

```
<!DOCTYPE html>
<html>
  <head>
    ...
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="./css/bootstrap.min.css" rel="stylesheet">
    <link href="./css/jumbotron.css" rel="stylesheet">

  </head>

  <body>
        ...
    <script src="./js/jquery.min.js"></script>
    <script src="./js/bootstrap.min.js"></script>
  </body>
</html>
```

Gird System

- 12-column grid
- Access through CSS classes
- Three key issues
  - –Containers
  - –Rows
  - –Columns

Containers

- Control layout
- Add padding
  - 15px each side
  - Element inside would not reach the side
- Two types
  - Fluid (always ajust to the size of the device)
    - .container-fluid
  - Fixed-Width(depends on the size of device, show fixed size)
    - .container

Fixed-Width Container

- 15 pixels padding on each side
- Adjust to media query breakpoints

	Extra Small <768px	Small ≥768px	Medium ≥992px	Large ≥1200px
Width	Auto	750px	970px	1170px

- Download and extract zip file "demo.container.fluid.src.zip".
- Add a "div" with class "container-fluid" to contain the "h1" and "P".

Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

Add a "DIV" with class "container-fluid" to contain the "h1" and "P".

```
<div class="container-fluid">
    <h1>Headline</h1>
    <p>...</p>
</div>
```

Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

Headline

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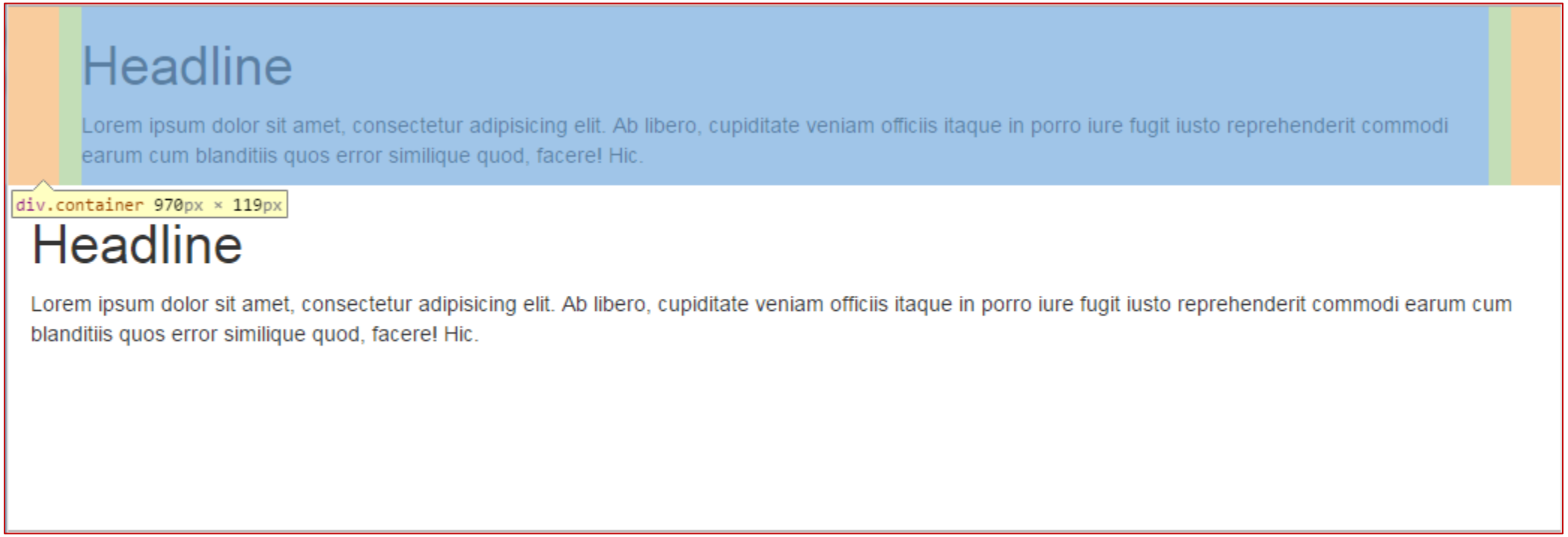
Clone the fluid "div" and modify its class to "container"

```
<div class="container">
    <h1>Headline</h1>
    <p>...</p>
</div>
<div class="container-fluid">
    <h1>Headline</h1>
    <p>...</p>
</div>
```


Headline
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.
div.container 970px × 119px
Headline
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

Add "header" before the two "div"s

```
<header class="bgimage">
    <div class="container">
        <h1>Headline</h1>
    </div>
</header>
<div class="container">
…
<div class="container-fluid">
```

Headline

Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

Headline

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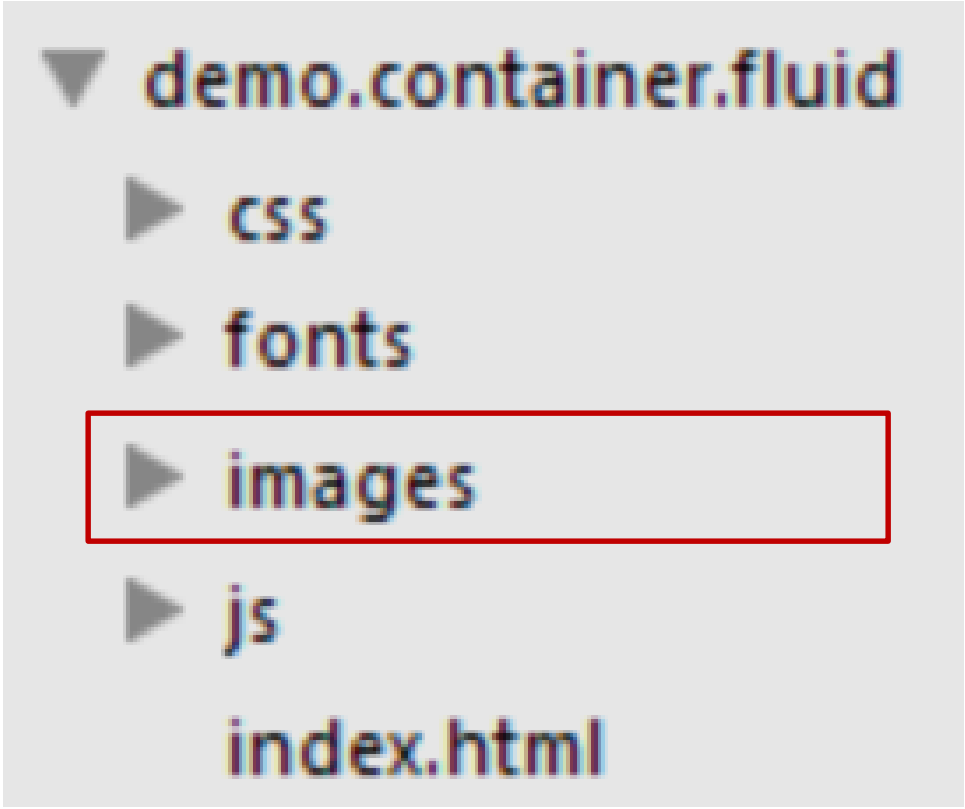
Create subfolder "images" and add one picture



- http://bossfight.co/

Create css/styles.css (save firstly)

```
.bgimage{
    background-image:
            url("../images/?????.jpg");
    background-position: center center;
    background-size: cover;
    height:200px;
}
```

1. Path is relative to style.css
2. Replace with your image's file name

background-size: cover;

- **CSS 3背景新屬性：background-size**
- 指定背景圖片大小

- **cover**主要用於背景圖小於所在的內容，而背景圖又不適合使用repeat，此時就可以採用cover的方式，使**背景圖放大至內容的大小**，但此方法容易使背景圖因放大而失真。

Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.